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PTO/SB/04 (09-00)

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## TRANSMITTAL FORM

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Total Number Of Pages In This Submission

6

Application Number

10/080,435

Filing Date

February 22, 2002

First Named Inventor

Mark G. ERLANDER

Group Art Unit

1645

Examiner Name

To Be Assigned

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100-12300

Attorney Docket No.

485772003300

### ENCLOSURES (check all that apply)

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| <input type="checkbox"/> Fee Transmittal Form  | <input type="checkbox"/> Assignment Papers<br>(for an Application)                      | <input type="checkbox"/> After Allowance Communication to Group                                 |
| <input type="checkbox"/> Fee Attached  | <input type="checkbox"/> Drawing(s)   | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences             |
| <input type="checkbox"/> Amendment / Reply   | <input type="checkbox"/> Licensing-related Papers                                       | <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)      |
| <input type="checkbox"/> After Final   | <input type="checkbox"/> Petition   | <input type="checkbox"/> Proprietary Information  |
| <input type="checkbox"/> Affidavits/declarations   | <input type="checkbox"/> Petition to Convert to a Provisional Application               | <input type="checkbox"/> Status Letter  |
| <input type="checkbox"/> Extension of Time Request   | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return postcard |
| <input type="checkbox"/> Express Abandonment Request   | <input type="checkbox"/> Terminal Disclaimer  | <i>re fs!</i>   |
| <input checked="" type="checkbox"/> Information Disclosure Statement; PTO form 1449; and 17 References | <input type="checkbox"/> Request for Refund   |   |
| <input type="checkbox"/> Certified Copy of Priority Document(s)  | <input type="checkbox"/> CD, Number of CD(s) _____                                      |   |
| <input type="checkbox"/> Response to Missing Parts/ Incomplete Application                             | <div style="border: 1px solid black; padding: 2px;">Remarks</div>                       |   |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53                           |   |   |

### SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

|                         |  |
|-------------------------|--|
| Firm or Individual Name | Kawai Lau, Registration No. 44,461<br>Morrison & Foerster LLP<br>3811 Valley Centre Drive, Suite 500; San Diego, CA 92130-2332 |
| Signature               |   |
| Date                    | December 17, 2002  |

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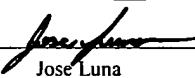
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PATENT  
Docket No. 485772003300

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\_\_\_\_\_  
Jose Luna

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Mark G. ERLANDER, et al.

Serial No.: 10/080,435

Filing Date: February 22, 2002

For: QUANTITATIVE  
IMMUNOHISTOCHEMISTRY (QIHC)

Examiner: To Be Assigned

Group Art Unit: 1645

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**INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. § 1.97**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of the documents are also submitted herewith. The Examiner is requested to make these documents of record.

This Information Disclosure Statement is submitted:

- With the application; accordingly, no fee or separate requirements are required.
- Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required.
- After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
  - A fee is required. A check in the amount of \* is enclosed.
  - A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
  - A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly; no fee is believed to be due.
- After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
  - A Certification under 37 C.F.R. § 1.97(e) is provided below and a check in the amount of \* is enclosed.
  - A Certification under 37 C.F.R. § 1.97(e) is provided below and a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.

Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to

charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing **485772003300**. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: December 17, 2002

Respectfully submitted,

By:



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|   |                                       |                               |
|---|---------------------------------------|-------------------------------|
| <p>Form PTO-1449<br/> <b>INFORMATION DISCLOSURE CITATION<br/>IN AN APPLICATION</b><br/> <i>(Use several sheets if necessary)</i></p> <p style="text-align: right;">O I P E JCSA<br/>DEC 24 2002<br/>PATENT &amp; TRADEMARK OFFICE</p> | Docket Number 485772003300            | Application Number 10/080,435 |
|   | Applicant<br>Mark G. ERLANDER, et al. |                               |
|   | Filing Date February 22, 2002         | Group Art Unit 1645           |
|   | Mailing Date December 17, 2002        |                               |
|   |                                       |                               |

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## U.S. PATENT DOCUMENTS

| Examiner Initials | Ref. No. | Date    | Document No. | Name            | Class | Subclass | Filing Date If Appropriate |
|-------------------|----------|---------|--------------|-----------------|-------|----------|----------------------------|
|                   | 1.       | 07/1994 | 5,328,985    | Sano et al.     | 530   | 350      |                            |
|                   | 2.       | 09/1997 | 5,665,539    | Sano et al.     | 435   | 6        |                            |
|                   | 3.       | 07/1999 | 5,922,553    | Eberwine et al. | 435   | 7.92     |                            |

## FOREIGN PATENT DOCUMENTS

| Examiner Initials | Ref. No. | Date    | Document No. | Country | Class | Subclass | Translation YES NO |
|-------------------|----------|---------|--------------|---------|-------|----------|--------------------|
|                   | 4.       | 08/1993 | WO 93/15229  | WIPO    |       |          |                    |

## OTHER DOCUMENTS

*(including author, title, Date, Pertinent Pages, Etc.)*

| Examiner Initials | Ref. No. | Title   |
|-------------------|----------|---|
|                   | 5.       | Brown et al. "Defining the Smallest Analyte Concentration An Immunoassay Can Measure" Clinical Chemistry 42(6):893-903 (1996)   |
|                   | 6.       | Cao et al. "In-Situ Immuno-PCR to Detect Antigens" Lancet 356:1002-1003 (2000)  |
|                   | 7.       | Chamberlin et al. <u>The Enzymes</u> (Boyer, ed.) Academic Press , New York pp.87-108 (1982)  |
|                   | 8.       | Ebersole et al. "Analyte Detection With DNA-Labeled Antibodies and Polymerase Chain Reaction" Clinical Chemistry 41(9):1371-1377 (1995)   |
|                   | 9.       | Emmert-Buck et al. "Laser Capture Microdissection" Science 274:998-1001 (1996)  |
|                   | 10.      | Hendrickson et al. "High Sensitivity Multianalyte Immunoassay Using Covalent DNA-Labeled Antibodies and Polymerase Chain Reaction" Nucleic Acids Research 23(3):522-529 (1995)    |
|                   | 11.      | McElhinny et al. "Detection of Major Histocompatibility Complex Class I Antigens on the Surface of a Single Murine Blastocyst by Immuno-PCR" Biotechniques 23(4):660-662 (1997)   |
|                   | 12.      | Niemeyer. "Bioorganic Applications of Semisynthetic DNA-Protein Conjugates" Chem. Eur. J. 7(15):3189-3195   |
|                   | 13.      | Sano et al. "Immuno-PCR: Very Sensitive Antigen Detection by Means of Specific Antibody-DNA Conjugates" Science 258:120-122 (1992)  |
|                   | 14.      | Shweitzer et al. "Immunoassays with Rolling Circle DNA Amplification: A Versatile Platform for Ultrasensitive Antigen Detection" Proc. Natl. Acad. Sci. USA 97:10113-10119 (2000) |

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Form PTO-1449

Docket Number 485772003300

Application Number 10/080,435

Applicant

Mark G. ERLANDER, et al.

Filing Date February 22, 2002

Group Art Unit 1645

Mailing Date December 17, 2002

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IN AN APPLICATION

(Use several sheets if necessary)

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- |  |     |  |
|--|-----|--|
|  | 15. | Sims et al. "Immunopolymerase Chain Reaction Using Real-Time Polymerase Chain Reaction for Detection" Analytical Biochemistry 281:230-232 (2000) |
|  | 16. | Zhang et al. "Cellular Immuno-PCR Detection of a Carbohydrate Tumor Marker" American Journal of Pathology 152:1427-1432 (1998)                   |
|  | 17. | Zhou et al. "Universal Immuno-PCR for Ultra-Sensitive Target Protein Detection" Nucleic Acids Research 21(25):6038-6039 (1993)                   |

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